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PULSE WAVE **SPECTROMETER**

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INVENTOR: KOJI KATAYAMA, et al. (1)
ASSIGNEE: KOWA CO
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ABSTRACT:

PURPOSE: To provide a pulse wave **SPECTROMETER** by which absorbance information of a blood component can be measured exactly, and a concentration analysis of the blood component can be executed.

CONSTITUTION: A measured part of a living body is irradiated with light by a **light source** 1, while fixing the measured part by a balloon of a **probe** 2 by applying pressure thereto, and an emitted light from the measured part is detected by separating into spectral components by a spectroscopy unit 6 and a photodiode array 7. To the **probe** 2, a photodiode 21 for detecting a scattered light from the vicinity of the measured part is attached, and the pulsation is detected through this photodiode 21. From a spectral output from the photodiode array 7, the maximum value and the minimum value are extracted by synchronizing with the pulsation detected by the photodiode 21 under the control of a CPU 8, and bases on these maximum value and minimum value, only a fluctuation component of a blood flow separated. Also, based on a detection signal of the photodiode 21, fixed pressure of the balloon is controlled continuously.